



UNITED STATES MARINE CORPS

MARINE CORPS LOGISTICS BASE

814 RADFORD BOULEVARD

ALBANY, GEORGIA 31704-1128

IN REPLY REFER TO:

BO 5100.13B

A 140

14 Dec 98

BASE ORDER 5100.13B

From: Commanding Officer  
To: Distribution List

Subj: RESPIRATORY PROTECTION PROGRAM

Ref: (a) 29 CFR 1910.134  
(b) ANSI Z88.2-1992 (NOTAL)  
(c) NIOSH Guide to Industrial Respiratory Protection  
87-116 (NOTAL)  
(d) ANSI/Compressed Gas Association Commodity Specification  
for Air, G-7.1-1988 (NOTAL)  
(e) Technical Manual 96-1, NEHC 6260 (NOTAL)

Encl: (1) Worksite-Specific Respiratory Protection Plan  
(2) User Seal Check Procedures  
(3) Respirator Cleaning Procedures

1. Purpose. To establish policy and procedures that will eliminate or minimize occupational employee exposures to respiratory hazards.

2. Cancellation. BO 5100.13A.

3. Summary of Revision

a. The Occupational Safety and Health Administration recently revised the respiratory protection standard (29 CFR 1910.134), reference (a). The new standard expands and clarifies employer's responsibilities in providing exposed workers with respirators, codifies existing consensus standards, and sets forth substance-specific respiratory protection requirements. In addition, it requires a worksite-specific respiratory protection plan be developed for each work area or process where workers are required to wear respiratory protection. This order incorporates these mandatory requirements and serves as the Base's formal respiratory protection program.

b. Organizations effected by this Order are not required to write a separate standard operating procedure for respiratory protection. This Order, with a complete and accurate worksite-specific respiratory protection plan for each work area or process, is adequate to serve as an organization's written respiratory protection program.

#### 4. Information

a. It is the policy of MCLB Albany to provide employees with a safe and healthful working environment. This is accomplished by using processes, equipment, and facilities that incorporate all feasible safeguards. The primary objective is to prevent atmospheric contamination by accepted engineering control measures (enclosing or confining the operation, general and local ventilation, and substitution of less toxic materials).

b. Respiratory protection is considered a backup method to protect employees from harmful dusts, fogs, fumes, mists, gases, smokes, sprays, or vapors. It will be used when engineering and administrative controls are not available, have not yet been implemented, are not in themselves sufficient to protect worker health, or in emergencies.

#### 5. Definitions

a. Air-Purifying Respirator (APR) - A respirator with an air-purifying filter, cartridge, or canister that removes specific air contaminants by passing ambient air through the air-purifying element.

b. Assigned Protection Factor (APF) - The numerical rating assigned to a class of respirators that represents the minimum anticipated ratio between the contaminant outside the respirator and the concentration inside. APF's found in references (b) and (c) will be used until revised by OSHA.

c. Atmosphere-Supplying Respirator - A respirator that supplies the respirator user with breathing air from a source independent of the ambient atmosphere, and includes supplied-air respirators (SARs) and self-contained breathing apparatus (SCBA) units.

d. Canister or Cartridge - A container with a filter, sorbent, or catalyst, or combination of these items, which removes specific contaminants from the air passed through the container.

e. Emergency Situation - Any occurrence such as, but not limited to, equipment failure, rupture of containers, or failure of control equipment that may or does result in an uncontrolled significant release of an airborne contaminant.

f. Employee Exposure - Exposure to a concentration of an airborne contaminant that would occur if the employee were not using respiratory protection.

g. End-of-Service-Life Indicator (ESLI) - A system that warns the respirator user of the approach of the end of adequate respiratory protection, for example, that the sorbent is approaching saturation or is no longer effective.

h. Escape-Only Respirator - A respirator intended to be used only for emergency exit.

i. Filter or Air Purifying Element - A component used in respirators to remove solid or liquid aerosols from the inspired air.

j. Fit Factor - A quantitative estimate of the fit of a particular respirator to a specific individual, and typically estimates the ratio of the concentration of a substance in ambient air to its concentration inside the respirator when worn.

k. Fit Test - The use of a protocol to qualitatively or quantitatively evaluate the fit of a respirator on an individual. (See also Qualitative fit test QLFT and Quantitative fit test QNFT.)

l. High Efficiency Particulate Air (HEPA) Filter - A filter that is at least 99.97 percent efficient in removing monodisperse particles of 0.3 micrometers in diameter. The equivalent NIOSH 42 CFR 84 particulate filters are the N100, R100, and P100 filters.

m. Immediately Dangerous to Life or Health (IDLH) - An atmosphere that poses an immediate threat to life, would cause irreversible adverse health effects, or would impair an individual's ability to escape from a dangerous atmosphere.

n. Interior Structural Firefighting - The physical activity of fire suppression, rescue or both, inside of buildings or enclosed structures which are involved in a fire situation beyond the incipient stage.

o. Maximum Use Concentration (MUC) - The maximum concentration of a toxic substance in ambient air for a specific type of respirator. It is generally determined by multiplying a contaminants exposure limit by the respirator's assigned protection factor.

p. Negative Pressure Respirator (Tight fitting) - A respirator in which the air pressure inside the facepiece is negative during inhalation with respect to the ambient air pressure outside the respirator.

q. Oxygen Deficient Atmosphere - An atmosphere with an oxygen content below 19.5 percent by volume.

r. Positive Pressure Respirator - A respirator in which the pressure inside the respiratory inlet covering exceeds the ambient air pressure outside the respirator.

s. Powered Air-Purifying Respirator (PAPR) - An air-purifying respirator that uses a blower to force the ambient air through air-purifying elements to the inlet covering.

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t. Qualitative Fit Test (QLFT) - A pass/fail fit test to assess the adequacy of respirator fit that relies on the individual's response to the test agent.

u. Quantitative Fit Test (QNFT) - An assessment of the adequacy of respirator fit by numerically measuring the amount of leakage into the respirator.

v. Self-Contained Breathing Apparatus (SCBA) - An atmosphere-supplying respirator for which the breathing air source is designed to be carried by the user.

w. Service Life - The period of time that a respirator, filter or sorbent, or other respiratory equipment provides adequate protection to the wearer.

x. Tight-Fitting Facepiece - A respiratory inlet covering that forms a complete seal with the face.

y. User Seal Check (Fit Check) - An action conducted by the respirator user to determine if the respirator is properly seated to the face.

## 6. General Requirements

### a. Respiratory Hazard Determination

(1) The annual industrial hygiene survey, conducted by the Branch Medical Clinic industrial hygienist, is the primary method to determine the need for respiratory protection for workers engaged in routine processes aboard base. The need for respiratory protection will be documented on the industrial hygiene survey and updated annually as work areas or processes change.

(2) The results of the annual industrial hygiene survey will be used by the organization's RPT (usually the organization's safety officer), and supervisors to develop a Worksite-Specific Respiratory Protection Plan using the outline at enclosure (1). A Worksite-Specific Respiratory Protection Plan is required for each work area or process where, based on the industrial hygiene survey, workers are required to wear respirators. The plans are to be completed, kept current and made available to the Respiratory Protection Program Manager (RPPM), located at the Safety & Occupational Health Office, as requested.

(3) For non-routine or new processes which may expose workers to hazardous substances or oxygen deficient atmospheres, the first-line supervisor or person responsible for performing the work will contact the organization's RPT who will then contact the RPPM for a respiratory hazard determination prior to starting the work. Examples of work which may be done on a non-routine basis and require the use of respirators include, but are not limited to:



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- (a) Asbestos abatement activities;
- (b) Abrasive blasting;
- (c) Cutting or melting lead or stripping lead-based paints;
- (d) Welding or burning;
- (e) Painting, especially with epoxy or organic solvent coatings;
- (f) Using solvents, thinners, or degreaser
- (g) Any work which generates large amounts of dust;
- (h) Working in a confined space;
- (i) Working with bioaerosols;

b. Respirator Selection

(1) Selection of the appropriate respirator will be conducted by the Branch Medical Clinic industrial hygienist and documented in the annual industrial hygiene survey. The maximum concentration of the substance in the work area will be obtained from area sampling or personal exposure monitoring. Reasonable estimates of worker exposure based on historical data, laboratory studies, or exposure models may also be used.

(2) For protection against gases and vapors, an atmosphere-supplying respirator will be used. An APR may also be used provided that the respirator is equipped with an ESLI certified by NIOSH for the contaminant. If there is no ESLI appropriate for conditions in the work area, an APR may still be used provided the canisters and cartridges are replaced in accordance with filter change schedules developed by the RPPM using data provided by the manufacturer, workplace environmental conditions, and other guidance as it becomes available.

(3) For protection against particulates, an atmosphere-supplying respirator; or an APR equipped with a filter certified by NIOSH under 30 CFR part 11 as a HEPA filter, or an APR equipped with a filter certified for particulates by NIOSH under 42 CFR part 84.

(4) If the atmosphere is uncharacterized, it will be considered to be IDLH and a positive pressure SCBA must be worn.

(5) Respirator selection for toxic substances that have a substance-specific OSHA standard (asbestos, lead, cadmium, benzene, etc) will comply with the substance-specific standard.

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(6) At a minimum, the APF of the respirator will equal or exceed the maximum hazard concentration in the work area.

(7) All respirators used by MCLB employees will be NIOSH approved. No components will be substituted, unless they are listed in the NIOSH approval. Any change or modification to a respirator may void the respirator approval and may adversely affect its performance.

(8) All filters, cartridges and canisters will be used with the NIOSH approval label affixed. The date the filter, cartridge or canister was installed on the respirator will be written on the filter, cartridge, or canister using indelible ink or an adhesive label.

c. Use of Respirators

(1) Workers will not wear a respirator unless it is the respirator for which they were medically qualified, fit tested, and trained on.

(2) Respirators will be worn according to the manufacturer instruction and consistent with the NIOSH approval.

(3) Workers may request a respirator when they are not required to wear a respirator due to the absence of a respiratory hazard. The desire to wear a respirator when not required is considered voluntary use. Voluntary use of respirators will only be authorized by the RPPM on a case-by-case basis. Workers who voluntarily use respirators are required to comply with all the medical qualification, maintenance, and respirator care provisions of this Order.

(4) Workers who wear a tight-fitting respirator will perform a user seal check each time they don the respirator using the procedures in enclosure (2) or procedures recommended by the respirator manufacturer.

(5) Workers will not wear tight-fitting respirators when:

(a) Facial hair comes between the sealing surface of the facepiece and the face or that interferes with valve function; or

(b) Any condition that interferes with the face-to-facepiece seal or valve function.

(6) Corrective glasses, goggles or other personal protective equipment, will be worn in a manner that does not interfere with the seal of the facepiece to the face of the user.

(7) Workers wearing respirators may leave their work area:

(a) To wash their faces and respirator facepieces as necessary to prevent eye or skin irritation associated with respirator use.

(b) To replace the respirator or the filter, cartridge, or canister elements.

(c) If they detect vapor or gas breakthrough (irritation or odor), changes in breathing resistance, or leakage of the facepiece.

(8) If the worker detects vapor or gas breakthrough, changes in breathing resistance, or leakage of the facepiece, the respirator will be replaced or repaired before the worker returns to the work area.

(9) Working in IDLH atmospheres: Except for interior structural firefighting, workers will not enter or perform work in an IDLH atmosphere unless authorized by the RPPM and the work orchestrated by the RPPM.

(10) Procedures for Interior Structural Firefighting:

(a) All firefighters engaged in interior structural firefighting will use SCBAs.

(b) Visual, voice, or signal line communication will be maintained between the firefighters in the IDLH atmosphere and the firefighters located outside the IDLH atmosphere.

(c) At least two firefighters will enter the IDLH atmosphere and remain in visual or voice contact with one another at all times.

(d) At least two firefighters will be located outside the IDLH atmosphere donned in the same level of protection as the firefighters inside the structure, and trained and equipped to provide effective emergency rescue.

d. Maintenance and Care of Respirators

(1) Cleaning and Disinfecting. Respirators will be cleaned and disinfected using the procedures in enclosure (3) or procedures recommended by the respirator manufacturer, provided that such procedures are of equivalent effectiveness. The respirators will be cleaned and disinfected at the following intervals:

(a) Respirators issued for the exclusive use of a worker will be cleaned and disinfected as often as necessary to be maintained in a sanitary condition.

(b) Respirators for use by more than one worker will be cleaned and disinfected before being worn by different individuals.

(c) Respirators maintained for emergency situation use will be cleaned and disinfected after each use.

(d) Respirators used in fit testing and training will be cleaned and disinfected using a disposable towelette before and after each fit testing session. These respirators will be cleaned and disinfected at the end of each fit testing day using the procedures in enclosure (3).

(2) Storage. All respirators will be stored to protect them from damage, contamination, dust, sunlight, extreme temperatures, excessive moisture, and damaging chemicals, and they will be packed or stored to prevent deformation of the facepiece and exhalation valve. Emergency situation use respirators will be:

(a) Kept accessible to the workers.

(b) Stored in compartments or in covers that are clearly marked as containing emergency use respirators.

(c) Stored in accordance with any applicable manufacturer instructions.

(3) Respirator Inspection.

(a) Respirators used in routine situations will be inspected before each use and during cleaning according to the manufacturer's inspection instructions.

(b) Emergency situation use respirators will be inspected and the inspection results documented at least monthly according to the manufacturer's instructions, and will be checked for proper function before and after each use. Inspection documentation will include the inspection date, the name (or signature) of the person who made the inspection, the findings, required remedial action, and a serial number or other means of identifying the inspected respirator. This information will be provided on a tag or label that is attached to the storage compartment for the respirator, is kept with the respirator, or is included in inspection reports stored as paper or electronic files. This information will be maintained until replaced following a subsequent certification.

(c) Escape-only respirators will be inspected before being carried into the workplace for use.

(d) Self-contained breathing apparatuses will be inspected and functionally tested monthly according to the manufacturer's instructions and the inspection results documented. Inspection

documentation will include the inspection date, the name (or signature) of the person who made the inspection, the findings, required remedial action, and a serial number or other means of identifying the inspected respirator. This information will be provided on a tag or label that is attached to the storage compartment for the respirator, is kept with the respirator, or is included in inspection reports stored as paper or electronic files. This information will be maintained until replaced following a subsequent certification.

(e) Self-contained breathing apparatus air cylinders will be maintained in a fully charged state and will be recharged when the pressure falls to 90 percent of the manufacturer's recommended pressure level.

(4) Repairs. Respirators that fail an inspection or are otherwise found to be defective will be removed from service, discarded or repaired or adjusted in accordance with the following procedures:

(a) Only persons trained to perform such operations will make repairs or adjustments to respirators. Only the respirator manufacturer's NIOSH-approved parts designed for the respirator will be used.

(b) Repairs will be made according to the manufacturer's recommendations and specifications for the type and extent of repairs to be performed.

(c) Reducing and admission valves, regulators, and alarms will be adjusted or repaired only by the manufacturer or a technician trained by the manufacturer.

e. Breathing Air Quality and Use

(1) Breathing air quality for workers using atmosphere-supplying respirators (supplied-air and SCBA) will meet at least the requirements for Type 1-Grade D breathing air described in reference (d) which are:

- (a) Oxygen content (v/v) of 19.5-23.5 percent;
- (b) Hydrocarbon (condensed) content of 5 milligrams per cubic meter of air or less;
- (c) Carbon monoxide content of 10 ppm or less;
- (d) Carbon dioxide content of 1,000 ppm or less;
- (e) Lack of noticeable odor.

(2) A certified laboratory will test the breathing air quality and the results will be posted near the compressor unit(s).

(3) Compressors used to supply breathing air to respirators will:

(a) Be situated to prevent entry of contaminated air into the air-supply system;

(b) Be situated to minimize moisture content so that the dew point at 1 atmosphere pressure is 10 degrees F (5.56 deg.C) below the ambient temperature;

(c) Have suitable in-line air-purifying sorbent beds and filters to further ensure breathing air quality. Sorbent beds and filters will be maintained and replaced or refurbished periodically following the manufacturer's instructions. A tag or similar document containing the most recent sorbent bed change date and the signature of the person who changed the sorbent beds will be displayed near the compressor.

## 7. Medical Evaluations for Respirator Use

a. Each respirator wearer will be medically evaluated and approved for respirator use by the Occupational Medicine Physician at the Branch Medical Clinic before being fit tested or wearing a respirator; and at least annually thereafter. Medical evaluations will consist of the employee completing the respirator medical evaluation questionnaire and specific medical tests required by reference (e).

b. The Occupational Medicine Physician will provide a written recommendation to the worker's supervisor through the organization RPT regarding the worker's ability to use the respirator. The recommendation will provide the following information:

(1) Any limitations on respirator use related to the medical condition of the employee, or relating to the workplace conditions in which the respirator will be used, including whether or not the employee is medically able to use the respirator;

(2) The need, if any, for follow-up medical evaluations; and

(3) A statement that the Occupational Medicine Physician has provided the worker with a copy of the written recommendation.

c. Additional medical evaluations will be performed if:

(1) The worker reports medical signs or symptoms related to the ability to use a respirator;

(2) The Occupational Medicine Physician, RPT, or RPPM informs the worker's supervisor that an additional medical evaluation is warranted;

(3) Information or observations made during fit testing and respiratory program evaluation, indicates a need for worker reevaluation; or

(4) A change occurs in workplace conditions (e.g., physical work effort, protective clothing, temperature) that may result in a substantial increase in the physiological burden placed on the worker.

## 8. Fit Testing

a. Each medically qualified wearer of a tight-fitting facepiece will be fit tested and pass an appropriate QLFT or QNFT. Fit testing will be conducted prior to initial use of the respirator, whenever a different respirator facepiece (size, style, model or make) is used, and at least annually thereafter.

b. The worker will be fit tested with the same make, model, style, and size of respirator that will be used in the workplace.

c. Fit testing protocols will be those listed in reference (a). The RPPM will provide the protocols to organization RPT's.

d. Additional fit testing will be conducted whenever the worker reports, or the Occupational Medicine Physician, supervisor, RPT, or RPPM makes visual observations of, changes in the worker's physical condition that could affect respirator fit. Such conditions include, but are not limited to, facial scarring, dental changes, cosmetic surgery, or an obvious change in body weight.

e. If after passing a QLFT or QNFT, the worker subsequently notifies the supervisor, RPPM, or Occupational Medicine Physician that the fit of the respirator is unacceptable, the worker will be given a reasonable opportunity to select a different respirator and be re-fit tested.

f. Fit testing of tight-fitting atmosphere-supplying respirators and tight-fitting PAPR's will be accomplished by performing QLFT or QNFT in the negative pressure mode, regardless of the mode of operation that is used for respiratory protection.

## 9. Training

a. Training will be provided so that all employees involved in the respiratory protection program acquire the understanding, knowledge, and skills necessary to perform their duties. Minimum specific training requirements for each position are as follows:

(1) RPPM. Completion of the course: Respiratory Protection Program Management (CIN: A-493-0072), Navy Occupational Safety, Health and Environmental Training Center, Naval Air Station, Norfolk, Virginia. Verification of this training will be maintained with the RPPM letter of appointment to the position.

(2) Respiratory Protection Technicians. RPT's will be trained by the RPPM after being appointed in writing by their respective division director or commander. The training will be tailored to the individual based on the respirators used in their unit and previous level of knowledge. At a minimum, RPT training will include:

(a) A review of this order and familiarization with 29 CFR 1910.134;

(b) Responsibilities of position;

(c) Types of respiratory hazards;

(d) Use and limitations of the types of respirators used within their organization;

(e) Maintenance, care, inspection, and repair of the types of respirators used within their organization;

(f) Filter change schedule/criteria;

(g) Fit testing procedures.

(3) Shop Foremen and supervisors will attend the Respiratory Protection portion of the Base Safety & Occupational Health Office's annual Industrial Supervisor Safety Training.

(4) Respirator wearer's will be trained annually and prior to being required to use a respirator in the workplace by their organization RPT on the following topics:

(a) Why the respirator is necessary and how improper fit, usage, or maintenance can compromise the protective effect of the respirator;

(b) Limitations and capabilities of the respirator;

(c) How to use the respirator effectively in emergency situations, including situations in which the respirator malfunctions;

(d) How to inspect, don, remove, use, and check the seals of the respirator;

(e) Procedures for maintenance and storage of the respirator;

(f) How to recognize medical signs and symptoms that may limit or prevent the effective use of respirators; and

(g) Filter change schedule/criteria.



(5) Respirator wearers will be retrained when the following situations occur:

(a) Changes in the workplace or the type of respirator render previous training obsolete;

(b) Inadequacies in the wearer's knowledge or use of the respirator indicate that the wearer has not retained the requisite understanding or skill; or

(c) Any other situation arises in which retraining appears necessary to ensure safe respirator use.

#### 10. Recordkeeping

a. Accurate and current records regarding medical evaluations, fit testing, and employee training is essential to maintain an effective respiratory protection program. This information will facilitate worker involvement in the respirator program, assist the RPPM and RPT's in auditing the adequacy of the program, and provide a record of compliance for OSHA or other officials inspecting the program.

b. Medical evaluation. Records of respiratory protection medical evaluations required by this Order and the Branch Medical Clinic will be retained and managed by the Branch Medical Clinic and made available in accordance with 29 CFR 1910.1020.

c. Fit testing. Organization RPT's will establish a record of the fit tests administered to a worker. The record will include at a minimum:

- (1) The name of the employee tested;
- (2) Type of fit test performed;
- (3) Specific make, model, style, and size of respirator tested;
- (4) Date of test; and
- (5) The pass/fail results for QLFTs or the fit factor and strip chart recording or other recording of the test results for QNFTs. Fit test records shall be retained for respirator users until the next fit test is administered.

d. Training. Organization RPT's will establish and maintain a record documenting the annual respirator training received by each respirator wearer. The training record will include:

- (1) The name of the employee trained;

(2) A list of the topics that were covered during the training (para. 9a.(4);

(3) A copy of the written test completed by the employee, if one was used.

#### 11. Program Evaluation

a. The Branch Medical Clinic Industrial Hygienist will evaluate the respiratory protection program annually to ensure that the written respiratory protection program is being properly implemented, and to ensure that workers are being protected from respiratory hazards. The results of this evaluation will be provided to the RPPM.

b. The RPPM will continually assess the effectiveness of the respiratory protection program and conduct periodic evaluations of division and command respiratory protection programs to ensure the provisions of the program are being effectively implemented and that it continues to be effective. These evaluations will include:

(1) Consulting employees required to use respirators to assess the employees' views on program effectiveness and to identify any problems;

(2) Respirator fit (including the ability to use the respirator without interfering with effective workplace performance);

(3) Appropriate respirator selection for the hazards to which the employee is exposed;

(4) Proper respirator use under the workplace conditions the employee encounters; and

(5) Proper respirator maintenance.

#### 12. Duties and Responsibilities

a. Base Commander, MCLB, Albany, will appoint in writing an individual from the Safety & Occupational Health Office as the RPPM. Appointment to the position will be upon completion of the training requirement in paragraph 9a.(1).

b. Safety & Occupational Health Manager will:

(1) Ensure the RPPM is trained and qualified to perform duties of the position;

(2) Provide the necessary resources to allow the RPPM to effectively manage the program;

(3) Budget for and fund respiratory protection equipment and training related to respiratory protection program management.

c. RPPM will:

- (1) Serve as the focal point for management of this program;
- (2) Establish and maintain a program that ensures employee protection from workplace respiratory hazards;
- (3) Develop a written respiratory protection program that includes all elements required by the Occupational Health and Safety Administration;
- (4) Maintain expert knowledge about respiratory protection and current regulatory requirements;
- (5) Provide training for RPT's;
- (6) Oversee the effectiveness and quality of training programs for respirator wearer's;
- (7) Provide fit test procedures, training resources, and filter change schedules to RPT's;
- (8) Maintain required program documents, records, and applicable references.

d. RPT's will:

- (1) Complete respirator training provided by the RPPM and any additional respirator manufacturer training recommended by the manufacture of respirators used in their organization;
- (2) Complete and maintain an accurate Worksite-Specific Respiratory Protection Plan for each work area in their organization where workers are required to wear respirators;
- (3) Perform periodic inspections of random respirators in their organization to confirm that the respirators or equipment is of the type specified in the worksite-specific respirator plan and is being used and maintained properly;
- (4) Perform and document the monthly inspection and function test of each SCBA used in the organization;
- (5) Maintain and/or have access to an inventory of respirators and associated parts and equipment;
- (6) Monitor maintenance and repair of respiratory protection equipment in accordance with the manufacturer's instructions;
- (7) Establish local procedures to remove from service and tagout any defective respirators or parts;

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(8) Conduct and maintain records of respirator training and fit testing for workers within their organization;

(9) Ensure that compressed breathing air cylinders are hydrostatically tested on schedule;

(10) Ensure that quarterly tests for compressed air quality are performed and the results maintained per the requirements in paragraph 6e.(1)

e. Commander, Branch Medical Clinic will:

(1) Provide medical evaluations to workers enrolled in the respiratory protection program;

(2) Generate and maintain required medical records for workers enrolled in the respiratory protection program;

(3) Perform employee exposure monitoring upon initial work in a potentially hazardous atmosphere and whenever work conditions change that may affect employee exposure. Document exposure monitoring the annual Industrial Hygiene Survey;

(4) Recommend the appropriate type of respirator for each work area based on MUC of the hazard. Document the respirator recommended and confirm the type of respirators used on the annual Industrial Hygiene Survey.

f. Centers/Departments/Division Directors; Commanding Officer, Headquarters Battalion; Commander/Officers-in Charge of Tenant Activities will:

(1) Ensure personnel under their command are informed of the respiratory hazards in their work areas and the provisions of this order;

(2) Appoint in writing one member of their organization to serve as their organization's RPT. This will usually be the organization's senior safety officer. Provide a copy of the appointment letter to the RPPM;

(3) Provide the necessary resources to their RPT's and workers to ensure compliance with this Order.

g. Supervisors will:

(1) Ensure that their workers have the requisite training, fit testing, and medical evaluation before authorizing them to wear a respirator;

(2) Ensure that any use of respirators by workers under their supervision is in accordance with this Order and the Worksite-Specific Respiratory Protection for the work area or process;

(3) Attend the Respiratory Protection portion of annual supervisor Safety Training;

(4) Initiate safety briefings on respiratory protection issues at the start of each new project or task that involves respiratory hazards for affected employees under their supervision;

(5) Record any complaints related to respirator usage, act promptly to investigate the complaints, correct any hazards, and get medical assistance. Report every respirator-related incident to the RPPM through the RPT before the end of the work shift;

(6) Physically check each respirator prior to its assignment to their workers to be sure that it is of the type specified in the Worksite-Specific Respiratory Protection Plan;

(7) Continually monitor compliance with the requirements of this Order.

h. Employees will:

(1) Use assigned respirator in accordance with the instructions and training provided;

(2) Immediately report any defects in the respiratory protection equipment and whenever there is a respirator malfunction, immediately evacuate to a safe area and report the malfunction;

(3) Promptly report to the supervisor any symptoms of illness that may be related to respirator usage or exposure to hazardous atmosphere;

(4) Clean and disinfect assigned respirator as often as necessary;

(5) Store respirators in accordance with manufacturer instructions;

(6) Be clean shaven in all facial areas that seal to the respirator facepiece;

(7) Allow nothing to interfere with the facepiece seal of the respirator;

(8) Inspect the respirator immediately before each use according to the manufacturer's instructions;

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(9) Perform a user seal, negative and positive respirator fit check each time a respirator is donned in accordance with training provided.

13. Applicability. This order is applicable to MCLB, Albany.

  
L. P. COLE

DISTRIBUTION: E

## USER SEAL CHECK PROCEDURES

The individual who uses a tight-fitting respirator is to perform a user seal check to ensure that an adequate seal is achieved each time the respirator is put on. Either the positive and negative pressure checks listed in this enclosure, or the respirator manufacturer's recommended user seal check method will be used. User seal checks are not substitutes for qualitative or quantitative fit tests.

### I. Facepiece Positive and/or Negative Pressure Checks

A. Positive pressure check. Close off the exhalation valve and exhale gently into the facepiece. The face fit is considered satisfactory if a slight positive pressure can be built up inside the facepiece without any evidence of outward leakage of air at the seal. For most respirators this method of leak testing requires the wearer to first remove the exhalation valve cover before closing off the exhalation valve and then carefully replacing it after the test.

B. Negative pressure check. Close off the inlet opening of the canister or cartridge(s) by covering with the palm of the hand(s) or by replacing the filter seal(s), inhale gently so that the facepiece collapses slightly, and hold the breath for ten seconds. The design of the inlet opening of some cartridges cannot be effectively covered with the palm of the hand. The test can be performed by covering the inlet opening of the cartridge with a thin latex or nitrile glove. If the facepiece remains in its slightly collapsed condition and no inward leakage of air is detected, the tightness of the respirator is considered satisfactory.

### II. Manufacturer's Recommended User Seal Check Procedures

The respirator manufacturer's recommended procedures for performing a user seal check may be used instead of the positive and/or negative pressure check procedures provided that the employer demonstrates that the manufacturer's procedures are equally effective.

Enclosure (2)

## WORKSITE-SPECIFIC RESPIRATORY PROTECTION PLAN

Division/Center \_\_\_\_\_ CWC/Shop \_\_\_\_\_ Date \_\_\_\_\_

**A. Task description:**

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**B. Atmospheric hazards (from IH Survey):**

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**C. Controls installed to reduce exposure:**

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**D. Required Respiratory Protection:**

Type	Type of Filter	Maximum Use Concentration	Filter Change Schedule	Limitations/Remarks

**E. Employee Information** (attach separate roster if necessary):

Name	Date of Med. Exam	Date of Training	Date of Fit Test

**F. Emergency Information:**

Signs/Symptoms of overexposure: \_\_\_\_\_

Evacuation procedures: \_\_\_\_\_

First-Aid procedures: \_\_\_\_\_

Supervisor Name: \_\_\_\_\_ Supervisors Signature: \_\_\_\_\_

RPT Name: \_\_\_\_\_ RPT Signature: \_\_\_\_\_

Enclosure (1)



## RESPIRATOR CLEANING PROCEDURES

These procedures are provided for workers to use when cleaning respirators. They are general in nature, and cleaning recommendations provided by the manufacturer of the respirators may be used if they are equivalent in effectiveness. Equivalent effectiveness simply means that the procedures used must ensure that the respirator is properly cleaned and disinfected in a manner that prevents damage to the respirator and does not cause harm to the user.

### I. Procedures for Cleaning Respirators

A. Remove filters, cartridges, or canisters. Disassemble facepieces by removing speaking diaphragms, demand and pressure-demand valve assemblies, hoses, or any components recommended by the manufacturer. Discard or repair any defective parts.

B. Wash components in warm (43 deg. C [110 deg. F] maximum) water with a mild detergent or with a cleaner recommended by the manufacturer. A stiff bristle (not wire) brush may be used to facilitate the removal of dirt.

C. Rinse components thoroughly in clean, warm (43 deg. C [110 deg. F] maximum), preferably running water. Drain.

D. When the cleaner used does not contain a disinfecting agent, respirator components should be immersed for two minutes in one of the following:

1. Hypochlorite solution (50 ppm of chlorine) made by adding approximately one milliliter of laundry bleach to one liter of water at 43 deg. C (110 deg. F); or,

2. Aqueous solution of iodine (50 ppm iodine) made by adding approximately 0.8 milliliters of tincture of iodine (6-8 grams ammonium and/or potassium iodide/100 cc of 45% alcohol) to one liter of water at 43 deg. C (110 deg. F); or,

3. Other commercially available cleansers of equivalent disinfectant quality when used as directed, if their use is recommended or approved by the respirator manufacturer.

E. Rinse components thoroughly in clean, warm (43 deg. C [110 deg. F] maximum), preferably running water. Drain. The importance of thorough rinsing cannot be overemphasized. Detergents or disinfectants that dry on facepieces may result in dermatitis. In addition, some disinfectants may cause deterioration of rubber or corrosion of metal parts if not completely removed.

F. Components should be hand-dried with a clean lint-free cloth or air-dried.

Enclosure (3)

G. Reassemble facepiece, replacing filters, cartridges, and canisters where necessary.

H. Inspect and test the respirator to ensure that all components work properly IAW the manufacturer's instructions.

Enclosure (3)